Information Systems Network Services Professional Educational Communications Board

Position Summary

Under the close supervision of the Media Program Supervisor of the Broadcast IT Unit, this position primarily provides services, assistance and support to plan, deploy, and support all aspects of ECB's broadcast information technology (BIT) infrastructure, including:

- ECB's BIT-related networks (BITRN), including Broadcast Services, Engineering, Emergency Alert System (EAS), National Weather Service Radio (NWS), and Administrative Wide Area Networks (WANs);
- ECB's Operations Center (OC) systems, networks, and related equipment;
- ECB's interconnections with edge providers and constituents;
- Broadcast equipment attached to ECB's BITRNs;
- Specification, acquisition, installation, modification, maintenance, security, and support of all BIT and BITRN-attached equipment and systems.

In addition, this position supports related ECB technical activities, including specification, acquisition, installation, modification, and maintenance of traditional broadcast/telecommunications equipment and systems. This position reports to the Broadcast IT Manager, however the enterprise-wide integration of this position also requires considerable coordination with, and direction from the OC manager and director of field engineering. Work is performed under close supervision initially and then may progress to a more limited level of supervision.

Goals and Worker Activities

40% A. Broadcast IT Related Networking (BITRN) Services

- A1. Assist in the Design, specification, acquisition, installation, implementation, configuration, modification, monitoring, troubleshooting, and upgrading of the network and associated IT components of all ECB's BITRN facilities, systems and equipment that support the enterprise's public media/broadcast, NWS, and EAS functions.
- A2. Assist in the administration and securing of access to ECB's BITRNs.
- A3. Assist in maintaining and ensuring the availability and security of all centralized, decentralized, and remote BITRN services.
- A4. Help develop policies, procedures, and standards to ensure BITRNs are reliable, secure and accessible.
- A5. Help document BITRN architectures, configurations, performance, problems, and assets.

- A6. Help research, test, and make recommendations for new, emerging, and/or upgraded BITRN technology, software, and hardware.
- A7. Provide input and support to BITRN capacity planning and monitoring, and performance of BITRN servers, systems, equipment, and related software.
- A8. Assist and provide input into the Planning and management of changes to BITRNs.
- A9. Assist in the establishment of requirements and specifications for BITRN hardware and software standards and acquisitions and develop bid specifications for these services and equipment.
- A10. Assist and support in providing network security recommendations as necessary to protect ECB's broadcast IT infrastructure.
- A11. Assist in managing software and firmware revision control of BITRN equipment.
- A12. Provide support and interact with BITRN edge providers and constituents to maintain network security, accountability, and performance.
- A13. Assist in establishing, maintaining, and operating remote management facilities for BITRN equipment and systems.
- A14. Analyze, troubleshoot, and resolve BITRN problems.

30% B. BITRN-Attached Equipment and System Services

- B1. Assist in the design, installation, acquisition, implementation, configuration, maintenance of security, modification, monitoring, troubleshooting, and upgrading of equipment and systems attached to all ECB's BITRNs that support the enterprise's public media/broadcast, NWS, and EAS functions.
- B2. Provide assistance and support in the administration and maintenance of security on the network to safeguard access to all BITRN-attached equipment.
- B3. Assist with developing policies, procedures, and standards to ensure BITRN-attached equipment and systems are reliable, accessible, and secure.
- B4. Assist with documenting BITRN-attached equipment architectures, configurations, performance, problems, and assets.
- B5. Provide support in researching, testing, and making recommendations for new, emerging, and/or upgraded BITRN-attached technology, software, and hardware.

- B6. Responsible for BITRN-attached equipment capacity planning and monitoring, and performance of BITRN-attached servers, systems, equipment, and related software.
- B7. Assist in planning and managing changes to BITRN-attached systems, equipment, and software.
- B8. Assist in establishing requirements and specifications for BITRN-attached hardware and software standards and acquisitions and develop bid specifications for these services and equipment.
- B9. Assist with managing software and firmware revision control of BITRN-attached equipment.
- B10. Assist with establishing, maintaining, and operating remote management facilities for BITRN-attached equipment and systems.
- B11. Help analyze, troubleshoot, and resolve BITRN-attached equipment and system problems.

20% C. Traditional Broadcast/Telecommunications Support

- C1. Work to gain fluency in effectively providing comprehensive maintenance and installation support on advanced telecommunication and broadcast systems.
- C2. Perform emergency repairs on all equipment and systems.
- C3. Work in conjunction with teams to construct, install, test, calibrate, modify, and troubleshoot traditional broadcast systems and equipment such as transmitters, towers, antennas, and transmission lines.
- C4. Assist with developing, designing, and improving microwave radio based communications systems.

10% D. Other Duties and Activities as Required or Assigned

- D1. Active participant in all stages and phases of the state procurement process for capital improvements within the agency.
- D2. Represent Wisconsin Public Broadcasting with civil, professional, and positive actions and demeanor.
- D3. Assure a workplace free of harassment and discrimination.
- D4. Occasional to frequent standby or on-call status may be required
- D5. Observe all industry-standard and ECB health and safety procedures and guidelines.

- D6. Lead by example in demanding a high level of organization and cleanliness at facilities of responsibility.
- D7. Provide support and assist with supervising the work of outside contractors.

Knowledge, Skills and Abilities

- 1. IT and networking standards as they pertain to broadcast infrastructure, systems and equipment.
- 2. Thorough knowledge of current LAN/WAN architectures, Client/Server technology, distributed database and data communications technology and capabilities.
- 3. Considerable knowledge of telecommunications systems and technology.
- 4. Network security best practices.
- 5. Windows, Linux and Virtual Machine (VM) Server Administrator.
- 6. Basic Programming skills. For example in systems such as Python, Bash, and PLC ladder logic programs.
- 7. Project management best practices.
- 8. Industry standard safety and security procedures and practices as applied to broadcast facilities.
- 9. Effective, clear and accurate written and verbal communications.
- 10. Clear, concise, and effective technical training.
- 11. Effective working relationships with other professionals internal and external to the organization.
- 12. Skill in STAR/PeopleSoft.
- 13. Ability to work on multiple tasks simultaneously and independently.
- 14. Ability to complete complicated tasks under time pressure.
- 15. Experience with Virtual Machine (VM) set up, configuration and Administration.

Special Requirements

- This position requires a variable, non-traditional work schedule including some nights and weekends.
- This position may require occasional standby or on-call status.
- This position may require the use of a personal vehicle.
- A valid Wisconsin driver's license or ability to provides one's own transportation.
- This position requires frequent in-state travel.
- Cisco certification preferred.